



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,652	08/26/2003	Thomas Brendel	03100131US	2125
7590	02/22/2006		EXAMINER	
McGuireWoods LLP Suite 1800 1750 Tysons Boulevard Tysons Corner McLean, VA 22102-4215			BOTTORFF, CHRISTOPHER	
			ART UNIT	PAPER NUMBER
			3618	
DATE MAILED: 02/22/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/647,652	BRENDEL, THOMAS	
	Examiner Christopher Bottorff	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 07 February 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 12 and 13 is/are allowed.  
 6) Claim(s) 1-11 and 14-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 26 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

The amendment filed December 19 2005 has been entered pursuant to the Request for Continued Examination filed February 7, 2006. Claims 1-20 are pending.

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recess extending entirely around the circumference, as defined in claims 17, 19, and 20, must be shown or the feature canceled from the claim. No new matter should be entered. Currently, the recess is depicted as only occupying a portion of the circumference of the fork pin.

Note recess 13 in Figures 4 and 5.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: the bracket "[" between "(Currently Amended)" and "A wheelchair" appears to be a typographical error and should be removed. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11, 14-16, and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claims 1 and 15 each require the driven wheels to be "front" wheels. However, the disclosure does not indicate that the driven wheels are "front" wheels, nor does the disclosure establish the conditions that would allow a wheel to be classified as a "front" wheel.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11, 14-16, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 15 require the driven wheels to be "front" wheels. However, the disclosure does not establish the conditions that would allow a wheel to be classified as a "front" wheel. As a result, the characteristics that render the position of the driven wheels to be a "front" position are not clear. The "front" position may depend upon the relative position of other wheelchair components or the relative position of objects that are external and unrelated to the wheelchair. For example, the "front" position of the wheelchair could be determined based upon the position of the seat or upon the components that first pass objects along the wheelchair's path of travel. For the purposes of examination, the driven wheels have been interpreted as being "front" wheels when they pass objects along the wheelchair's path of travel before the castors.

Claims 17, 19, and 20 recite the limitation "about a circumference" in line 7 of each claim, which suggests that the recess extends entirely around the circumference of the fork pin. However, the disclosure suggests that the recess only occupies a portion of the circumference of the fork pin without extending entirely around the circumference. Figures 4 and 5 depict recess 13, but only show recess 13 at a portion of the fork pin circumference. Consequently, the scope of the expression "about a circumference" is not clear. For the purposes of examination, the limitation "about a

circumference" is interpreted as requiring the recess to only occupy a portion of the circumference of the fork pin.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9, 15, 16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee US 6,302,421.

Lee discloses a wheelchair having two driven wheels 26 and at least one castor 14 that is mounted in a rotatable manner in a fork 12F, which can be pivoted about a vertical axis. See Figures 1A-1N and column 8, lines 12-14. Wheels 26 may be driven by pedals, a motor, and by external forces applied to the wheelchair, such as at bar 10b, that cause the wheels to roll. See Figure 1A and column 8, lines 25-33. When the wheelchair is driven in reverse, as by external forces or motor, such that the seat assembly 28 leads the steering wheel 22 along the wheelchair's path of travel, driven wheels 26 are "front" wheels.

The fork 12F has an upwardly projecting fork pin 12A and is connected to a steering linkage 34, 38, wherein the connection between the fork 12F and the steering

linkage 34, 38 is releasable by actuation of a bolt in coupling 32 which is subject to a load by a spring. See Figures 1B and 1N and column 8, lines 49-50 and 62-67. A recess 12D arranged on a circumference of the fork pin 12A is engageable with the bolt to releasably connect the fork 12F to the steering linkage 34, 38. See Figures 1B and 1N.

The at least one caster 14 comprises two castors each mounted in a fork 12F. See Figure 1B. The forks 12F are connected to one another via the steering linkage 34, 38. See Figure 1B. The forks 12F are mounted such that each can be rotated about a vertical axis through 360 degrees. See column 8, lines 50-53. The forks 12F can be blocked mechanically in relation to the steering linkage by coupling 32, and can be blocked in the straight-ahead position of the castors unless steered in another direction. See Figures 1M and 1F. The forks 12F are each mounted, via the fork pin 12A and bearings, in a bushing 12B. See Figure 1N. The bolt can be pushed, transversely to the vertical axis, into the recess 12D in the fork pin 12A. See Figures 1M and 1N. The bolt is subjected to loading by a compression spring and can be displaced counter to the force of the compression spring. See column 8, lines 62-67. Also, the bolt is connected to an actuating lever (formed by the ring disposed on the end of the pin opposite fork pin 12A), which is mounted in a pivotable manner on a spindle (formed by the coupling housing that surrounds and supports the pin in coupling 32). See Figure 1N.

***Claim Rejections - 35 USC § 103***

Claims 10, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee US 6,302,421 in view of Kovacs US 5,170,529.

Lee does not disclose a pivot-lever arrangement as defined in claims 10, 11, and 14. However, Kovacs teaches the desirability of providing such a pivot-lever arrangement on a caster wheeled vehicle. See Figures 3 and 4. The bolt 50 can be displaced via a pivot-lever arrangement 26, 44 in which the bolt 50 is displaced via a linearly displaceable lever 44 acted on by a pivot lever 26. See Figure 4. Also, the pivot lever 26 has a rounded protuberance at its front end. See Figures 3 and 4.

From the teachings of Kovacs, providing the wheelchair of Lee with a pivot-lever arrangement as claimed would have been obvious to one of ordinary skill in the art at the time the invention was made. Such a modification would provide a structure that efficiently actuates the bolts of each caster.

***Allowable Subject Matter***

Claims 12 and 13 are allowed. Claim 12 requires the linearly displaceable lever to have a run on slope that interacts with a radial shoulder of the bolt. Claim 13 requires the pivot lever to be mounted on a spindle connected to the bushing. These features, in combination with the further limitations of the claim, are not taught by the prior art.

Claims 17, 19, and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The prior art

does not teach an outer end of a steering linkage having both a horizontally running through-passage bore and a vertical bore, a vertically displaceable lever provided with a run-on-slope that interacts with the bolt, or two connected pivot levers with a pivoting motion initiated by a piston rod interacting with the fork. These features, in combination with the further limitations of the claims from which they depend, are not taught by the prior art.

### ***Response to Arguments***

Applicant's arguments filed December 19, 2005 have been fully considered but they are not persuasive.

Applicant asserts that Lee discloses an operator driven vehicle that uses driven "rear" wheels, while the claimed invention distinguishes over Lee by allegedly using "front" driven wheels. However, Applicant's disclosure does not establish that the driven wheels of the present invention are "front" wheels, nor does Applicant's disclosure establish the criteria upon which a designation of "front" can be based. The limits of "front," as used in the present claims, are not clear.

Also, the terms "front" and "rear" may be used differently in different contexts, as is evident in Lee. That is, while a wheelchair position may be designated as a "front" position when that portion of the wheelchair will be the leading portion when traveling in one direction or viewed from a particular perspective, that same portion will become a "rear" portion when the wheelchair travels in the opposite direction or is viewed from the opposite perspective. Consequently, the designations "front" and "rear" do not

necessarily place definitive limits on a physical structure, and limits are not placed upon the wheels of Lee by the designations "front" and "rear."

Furthermore, the wheelchair operator does not necessarily drive the driven wheels of Lee, as applicant contends. While an operator may drive the wheels by a pedal system, the wheels may alternatively be driven by a motor and external push/ pull forces applied to the wheelchair to cause the wheels to rotate. The present claims do not limit the driven wheels to a particular manner of being driven, and the driven wheels of Lee are not limited to one particular manner of being driven. The ability to drive the wheelchair of Lee in the reverse direction allows wheels 26 to be driven "front" wheels.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher Bottorff